19th International Symposium on Experimental Algorithms

SEA 2021, June 7–9, 2021, Nice, France

Edited by

David Coudert

Emanuele Natale

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Editors

David Coudert
I3S (CNRS-UCA)/Inria, Sophia Antipolis, France
david.coudert@inria.fr

Emanuele Natale
Université Côte d'Azur, CNRS, France
emanuele.natale@inria.fr

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Preface

We are pleased to present the collection of papers accepted for presentation at the 19th edition of the International Symposium on Experimental Algorithms (SEA 2021), originally planned to be held in Nice (France) from June 6 to 9, 2021. Unfortunately, due to the health situation in France and in the rest of world, we were unable to organize a physical event, and the symposium will be again a virtual event, as it has been last year.

SEA, previously known as Workshop on Experimental Algorithms (WEA), is an international forum for researchers in the area of the design, analysis, and experimental evaluation and engineering of algorithms, as well as in various aspects of computational optimization and its applications (telecommunications, transport, bioinformatics, cryptography, learning methods, etc.). The symposium aims at attracting papers from both the Computer Science and the Operations Research/Mathematical Programming communities. The main theme of the symposium is the role of experimentation and of algorithm engineering techniques in the design and evaluation of algorithms and data structures. Submissions to SEA are requested to present significant contributions supported by experimental evaluation, methodological issues in the design and interpretation of experiments, the use of heuristics and meta-heuritics, or application-driven case studies that deepen the understanding of the complexity of a problem. A main goal of SEA is also the creation of a friendly environment that can lead to and ease the establishment or strengthening of scientific collaborations and exchanges among attendees. For this reason, the symposium solicits high-quality original research papers (including significant work-in-progress) on any aspect of experimental algorithms.

Each submission to SEA 2021 was reviewed by at least three Program Committee members or external reviewers. After a careful peer review and evaluation process, 23 papers were accepted for presentation and for inclusion in the LIPIcs proceedings, according to the reviewers' recommendations. The acceptance rate was 56%. The scientific program of the symposium also includes presentations by three keynote speakers: Dominik Kempa (Johns Hopkins University, USA), Petra Mutzel (University of Bonn, Germany) and Blair D. Sullivan (University of Utah, USA).

The 19th edition of SEA was organized by the I3S laboratory (Université Côte d'Azur, CNRS). We thank Corinne Julien-Haddad for her help in the organization of this symposium. We also thanks Université Côte d'Azur, the research center Inria Sophia Antipolis - Méditerranée, and the city of Nice (Comité Doyen Lépine) for their financial support. We also thank the SEA steering committee for giving us the opportunity to host SEA 2021. We express our gratitude to the EasyChair platform. Thanks are also due to the editors of the ACM Journal of Experimental Algorithmics for their interest in hosting a special issue of the best papers presented at SEA 2021. Finally, we express our gratitude to the members of the Program Committee for their support, collaboration, and excellent work.

Nice, June 6 2021
David Coudert and Emanuele Natale

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